This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Other				
Adjuvant	TANK-binding kinase 1 (TBK1)	Studies in mice show that activation of TBK1 signaling pathways is necessary for DNA vaccine immunogenicity, suggesting that addition of TBK1 agonists could enhance DNA vaccine efficacy. TBK1 knockout mice showed reduced antigen-specific T and B cell responses after immunization with a DNA vaccine encoding LacZ or influenza A NP compared with immunized wild-type controls. Also, immunization of TBK1 knockouts with influenza A NP in combination with a Toll-like receptor (TLR) 9–activating adjuvant led to an antigen-specific immune response comparable to controls, which suggests that TBK1 is independent of TLR signaling. Next steps include studies to determine whether activation of the TBK1-dependent signaling pathway is involved in the immunogenicity of other DNA vaccines.	Not patented; licensing status undisclosed	Ishii, K. *et al. Nature*; published online Feb. 7, 2008; doi:10.1038/nature06537 **Contact:** Ken Ishii, Osaka University, Japan e-mail: kenishii@biken.osaka-u.ac.jp